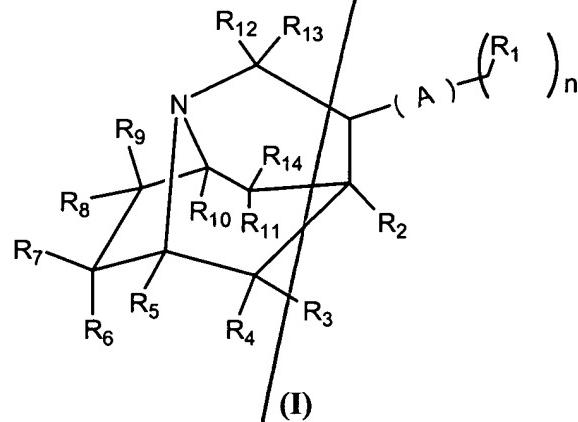


Clean Version of Amended Claims

1. (amended) A compound represented by formula (I):

A 2



wherein,

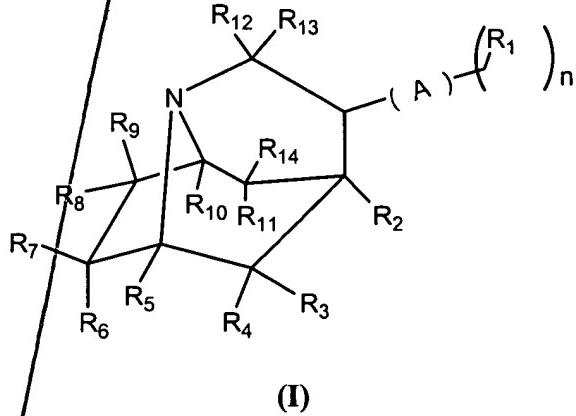
A is either a double bond or a single bond, n is 2 or 3, and each occurrence of R₁ is independently selected from the group consisting of hydrogen, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl;

R₂-R₁₃ each independently are selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkoxy, acyl, amino, hydroxy, thio, halogen, cyano, nitro, trifluoromethyl, azido, imino, amido, phosphoryl, sulfonyl, silyl group, ether, alkylthio, and carbonyl;

R₁₄ is selected from the group consisting of ester, O-R₁₅, wherein R₁₅ is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, alkenyl, and alkynyl; ketone; oxime; carboxylic acid; aldehyde; phosphoryl; and silyl; or a pharmaceutically acceptable salt thereof.

2. (amended) The compound of claim 1, wherein one occurrence of R₁ is selected from the group consisting of aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl; A is a double bond; n = 2; at least one occurrence of R₁ is hydrogen, and the compound is an E (entgegen) or Z (zusammen) isomer; R₂-R₁₃ each independently represent hydrogen or alkyl; and R₁₄ is an ester.

- A2
Cont*
3. (amended) The compound of claim 1, wherein one occurrence of R₁ is selected from the group consisting of haloaryl, alkoxy, alkylaryl, polycyclyl, alkenylaryl, and alkynylaryl; and either one or two occurrences of R₁ represent hydrogen.
4. (amended) The compound of claim 1, wherein A is a double bond; n = 2; and one occurrence of R₁ is selected from the group consisting of phenyl, 3,4-Dichloro-phenyl, 4-methoxy-phenyl, 4-fluoro-phenyl, 1-naphthyl, 2-furyl, 3-furyl, methoxy, and substituted or unsubstituted alkenylaryl, and the second occurrence of R₁ is hydrogen, and the compound is an E (entgegen) isomer.
5. (amended) The compound of claim 1, wherein one occurrence of R₁ is 4-methoxy-phenyl, one occurrence of R₁ is hydrogen; R₂-R₁₃ each represent hydrogen; and R₁₄ represents an ester.
6. (amended) The compound of claim 1, wherein one occurrence of R₁ is phenyl, one occurrence of R₁ is hydrogen, R₂-R₁₃ each represent hydrogen, and R₁₄ represents an ester.
7. (amended) A pharmaceutical composition comprising a compound of formula (I):



wherein,

A is either a double bond or a single bond, n is 2 or 3, and each occurrence of R₁ is independently selected from the group consisting of hydrogen, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl;

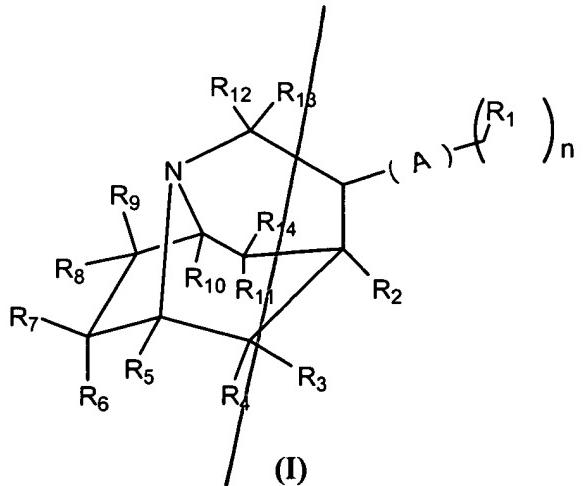
[Signature]

R₂-R₁₃ each independently are selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkoxy, acyl, amino, hydroxy, thio, halogen, cyano, nitro, trifluoromethyl, azido, imino, amido, phosphoryl, sulfonyl, silyl group, ether, alkylthio, and carbonyl;

R₁₄ is selected from the group consisting of ester, O-R₁₅, wherein R₁₅ is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, alkenyl, and alkynyl; ketone; oxime; carboxylic acid; aldehyde; phosphoryl; and silyl; or a pharmaceutically acceptable salt thereof; and

a pharmaceutically acceptable carrier.

- A 1
cont
8. **(amended)** The pharmaceutical composition of claim 7, wherein one occurrence of R₁ is selected from the group consisting of aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl; A is a double bond; n = 2; at least one occurrence of R₁ is hydrogen, and the compound is an E (entgegen) or Z (zusammen) isomer; and R₂-R₁₃ each independently represent hydrogen or alkyl; and R₁₄ is an ester.
 9. **(amended)** The pharmaceutical composition of claim 7, wherein one occurrence of R₁ is selected from the group consisting of haloaryl, alkoxy, alkylaryl, polycyclyl, alkenylaryl, and alkynylaryl; and one or two occurrences of R₁ represent hydrogen.
 10. **(amended)** The pharmaceutical composition of claim 7, wherein A is a double bond; n = 2; and one occurrence of R₁ is selected from the group consisting of phenyl, 3,4-Dichloro-phenyl, 4-methoxy-phenyl, 4-fluoro-phenyl, 1-naphthyl, 2-furyl, 3-furyl, methoxy, and substituted or unsubstituted alkenylaryl, and the second occurrence of R₁ is hydrogen, and the compound is an E (entgegen) isomer.
 11. **(amended)** A method for treating a disorder caused by a deficiency in monoamine concentration in a human comprising administering a therapeutically effective dose of a compound of formula (I):



Seth B1

wherein,

A is either a double bond or a single bond, n is 2 or 3, and each occurrence of R₁ is independently selected from the group consisting of hydrogen, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl;

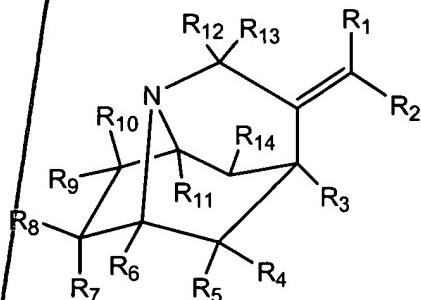
R₂-R₁₃ each independently are selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkoxy, acyl, amino, hydroxy, thio, halogen, cyano, nitro, trifluoromethyl, azido, imino, amido, phosphoryl, sulfonyl, silyl group, ether, alkylthio, and carbonyl;

R₁₄ is selected from the group consisting of ester, O-R₁₅, wherein R₁₅ is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, alkenyl, and alkynyl; ketone; oxime; carboxylic acid; aldehyde; phosphoryl; and silyl; or a pharmaceutically acceptable salt thereof.

- A 1
cont*
12. **(amended)** The method of claim 11, wherein one occurrence of R₁ is selected from the group consisting of aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl; A is a double bond; n = 2; at least one occurrence of R₁ is hydrogen, and the compound is an E (entgegen) or Z (zusammen) isomer; and R₂-R₁₃ each independently represent hydrogen or alkyl; and R₁₄ is an ester.
 13. **(amended)** The method of claim 11, wherein one occurrence of R₁ is selected from the group consisting of haloaryl, alkoxy, alkylaryl, polycyclyl, alkenylaryl, and alkynylaryl; and one or two occurrences of R₁ represent hydrogen.

- Selby BP*
- A 1 cont*
14. (amended) The method of claim 11, wherein A is a double bond; n = 2; and one occurrence of R₁ is selected from the group consisting of phenyl, 3,4-Dichlorophenyl, 4-methoxy-phenyl, 4-fluoro-phenyl, 1-naphthyl, 2-furyl, 3-furyl, methoxy, and substituted or unsubstituted alkenylaryl, and the second occurrence of R₁ is hydrogen, and the compound is an E (entgegen) isomer.
 15. (amended) The method of claim 11, wherein said disorder in a human is associated with a deficiency in the concentration of serotonin or norepinephrine.
 16. (amended) The method of claim 11, wherein said disorder in a human is selected from the group consisting of depression, substance addiction, neurodegenerative disease, Attention Deficit Disorder, Huntington's Disease, and bipolar disorder.
 17. (amended) The method of claim 16, wherein said disorder in a human is Parkinson's Disease or Alzheimer's Disease.
 18. (amended) The method of claim 16, wherein said substance addiction is cocaine addiction.

- A 2*
27. (amended) A compound represented by formula (II):



(II)

wherein,

R₁ and R₂ each independently are selected from the group consisting of hydrogen, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl;

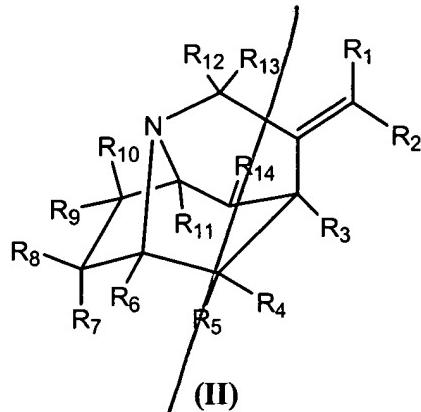
R₃-R₁₃ each independently are selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkoxy,

Seth B.
acyl, amino, hydroxy, thio, halogen, cyano, nitro, trifluoromethyl, azido, imino, amido, phosphoryl, sulfonyl, silyl group, ether, alkylthio, and carbonyl;

*A 2
Cont*
 R_{14} is selected from the group consisting of ester, O- R_{15} , wherein R_{15} is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, alkenyl, and alkynyl; ketone; oxime; carboxylic acid; aldehyde; phosphoryl; and silyl; or a pharmaceutically acceptable salt thereof.

28. **(amended)** The compound of claim 27, wherein R_1 is selected from the group consisting of aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl, and R_2 is hydrogen, or R_2 is selected from the group consisting of aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl, and R_1 is hydrogen, and the compound is an E (entgegen) or Z (zusammen) isomer; R_3 - R_{13} each independently represent hydrogen or alkyl; and R_{14} is an ester.
29. **(amended)** The compound of claim 27, wherein R_1 is selected from the group consisting of haloaryl, alkoxy, alkylaryl, polycyclyl, alkenylaryl, and alkynylaryl; and R_2 is hydrogen; or R_2 is selected from the group consisting of haloaryl, alkoxy, alkylaryl, polycyclyl, alkenylaryl, and alkynylaryl; and R_1 is hydrogen.
30. **(amended)** The compound of claim 27, wherein R_1 is selected from the group consisting of phenyl, 3,4-Dichloro-phenyl, 4-methoxy-phenyl, 4-fluoro-phenyl, 1-naphthyl, 2-furyl, 3-furyl, methoxy, and substituted or unsubstituted alkenylaryl; and R_2 is hydrogen, and the compound is an E (entgegen) isomer.
31. **(amended)** The compound of claim 27, wherein R_1 is 4-methoxy-phenyl, R_2 is hydrogen, R_3 - R_{13} each represent hydrogen, and R_{14} is an ester.
32. **(amended)** The compound of claim 27, wherein R_1 is phenyl, R_2 is hydrogen, R_3 - R_{13} each represent hydrogen, and R_{14} is an ester.
33. **(amended)** A pharmaceutical composition comprising a compound of formula (II):

Sachin Bhatia



wherein,

R₁ and R₂ each independently are selected from the group consisting of hydrogen, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl;

R₃-R₁₃ each independently are selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkoxy, acyl, amino, hydroxy, thio, halogen, cyano, nitro, trifluoromethyl, azido, imino, amido, phosphoryl, sulfonyl, silyl group, ether, alkylthio, and carbonyl;

R₁₄ is selected from the group consisting of ester, O-R₁₅, wherein R₁₅ is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, alkenyl, and alkynyl; ketone; oxime; carboxylic acid; aldehyde; phosphoryl; and silyl; or a pharmaceutically acceptable salt thereof; and

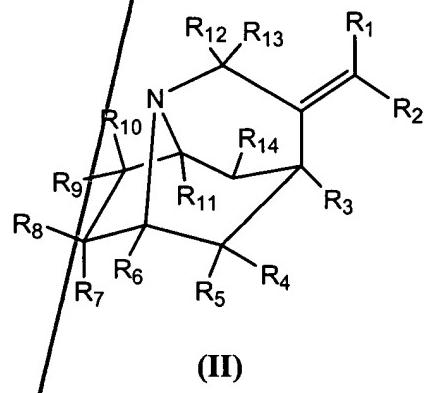
a pharmaceutically acceptable carrier.

34. **(amended)** The pharmaceutical composition of claim 33, wherein R₁ is selected from the group consisting of aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl, and R₂ is hydrogen, or R₂ is selected from the group consisting of aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl, and R₁ is hydrogen, and the compound is an E (entgegen) or Z (zusammen) isomer; R₃-R₁₃ each independently represent hydrogen or alkyl; and R₁₄ is an ester.

35. **(amended)** The pharmaceutical composition of claim 33, wherein R₁ is selected from the group consisting of haloaryl, alkoxy, alkylaryl, polycyclyl, alkenylaryl, and alkynylaryl; and R₂ is hydrogen; or R₂ is selected from the group consisting of

Selby
36. haloaryl, alkoxy, alkylaryl, polycyclyl, alkenylaryl, and alkynylaryl; and R₁ is hydrogen.

36. (amended) The pharmaceutical composition of claim 33, wherein R₁ is selected from the group consisting of phenyl, 3,4-Dichloro-phenyl, 4-methoxy-phenyl, 4-fluoro-phenyl, 1-naphthyl, 2-furyl, 3-furyl, methoxy, and substituted or unsubstituted alkenylaryl; and R₂ is hydrogen, and the compound is an E (entgegen) isomer.
37. (amended) A method for treating a disorder caused by a deficiency in monoamine concentration in a human comprising administering a therapeutically effective dose of a compound of formula (II):



(II)

wherein,

R₁ and R₂ each independently are selected from the group consisting of hydrogen, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl;

R₃-R₁₃ each independently are selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkoxy, acyl, amino, hydroxy, thio, halogen, cyano, nitro, trifluoromethyl, azido, imino, amido, phosphoryl, sulfonyl, silyl group, ether, alkylthio, and carbonyl;

R₁₄ is selected from the group consisting of ester, O-R₁₅, wherein R₁₅ is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, alkenyl, and alkynyl; ketone; oxime; carboxylic acid; aldehyde; phosphoryl; and silyl; or a pharmaceutically acceptable salt thereof.

- Sub B1*
- A 2
cont*
38. **(amended)** The method of claim 37, wherein R₁ is selected from the group consisting of aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl, and R₂ is hydrogen, or R₂ is selected from the group consisting of aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl, and R₁ is hydrogen, and the compound is an E (entgegen) or Z (zusammen) isomer; R₃-R₁₃ each independently represent hydrogen or alkyl; and R₁₄ is an ester.
 39. **(amended)** The method of claim 37, wherein either R₁ is selected from the group consisting of haloaryl, alkoxy, alkylaryl, polycyclyl, alkenylaryl, and alkynylaryl; and R₂ is hydrogen; or R₂ is selected from the group consisting of haloaryl, alkoxy, alkylaryl, polycyclyl, alkenylaryl, and alkynylaryl; and R₁ is hydrogen.
 40. **(amended)** The method of claim 37, wherein R₁ is selected from the group consisting of phenyl, 3,4-Dichloro-phenyl, 4-methoxy-phenyl, 4-fluoro-phenyl, 1-naphthyl, 2-furyl, 3-furyl, methoxy, and substituted or unsubstituted alkenylaryl; and R₂ is hydrogen, and the compound is an E (entgegen) isomer.
 41. **(amended)** The method of claim 37, wherein said disorder in a human is associated with a deficiency in the concentration of serotonin or norepinephrine.
 42. **(amended)** The method of claim 37, wherein said disorder in a human is selected from the group consisting of depression, substance addiction, neurodegenerative disease, Attention Deficit Disorder, Huntington's Disease, and bipolar disorder.
 43. **(amended)** The method of claim 42, wherein said disorder in a human is Parkinson's Disease or Alzheimer's Disease.
 44. **(amended)** The method of claim 42, wherein said substance addiction is cocaine addiction.